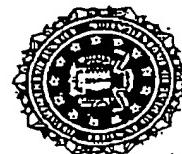


Express Mail No. EL 977935667
Serial No. 09/424,685
Filed: January 11, 2000

Exhibit A

THE SCIENCE
OF
FINGERPRINTS

Classification and Uses



UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20407
Stock No. 1627-001-00017-2 / Catalog No. 11142-F1972-077

B-3

Types of Patterns and Their Interpretation

Types of patterns

Fingerprints may be resolved into three large general groups of patterns, each group bearing the same general characteristics or family resemblance. The patterns may be further divided into sub-groups by means of the smaller differences existing between the patterns in the same general group. These divisions are as follows:

- I. ARCH
 - II. LOOP
 - III. WHORL
- a. Plain arch.
 - b. Tented arch.
 - a. Radial loop.
 - b. Ulnar loop.
 - a. Central nuclear loop.
 - c. Double loop.
 - d. Accidental whorl.

3. Tented arch.

4. Loop.

Illustrations 1 to 10 are examples of the various types of fingerprint patterns.



2. Tented arch.

1. Plain arch.

Interpretation

Before pattern definition can be understood, it is necessary to understand the meaning of a few technical terms used in fingerprint work. The *pattern area* is the only part of the finger impression with which we are concerned in regard to interpretation and classification. It is present in all patterns, of course, but in many arches and tented arches it is im-

3. Tented loop.
4. Double loop.

5. Plain arch.
6. Central pocket loop.

7. Plain whorl.

B-4

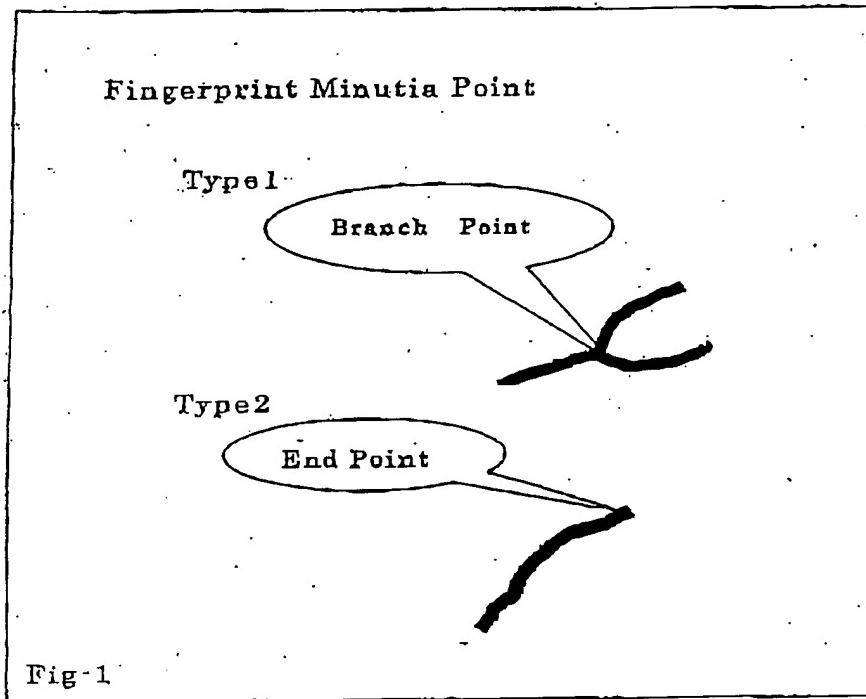


Fig-1

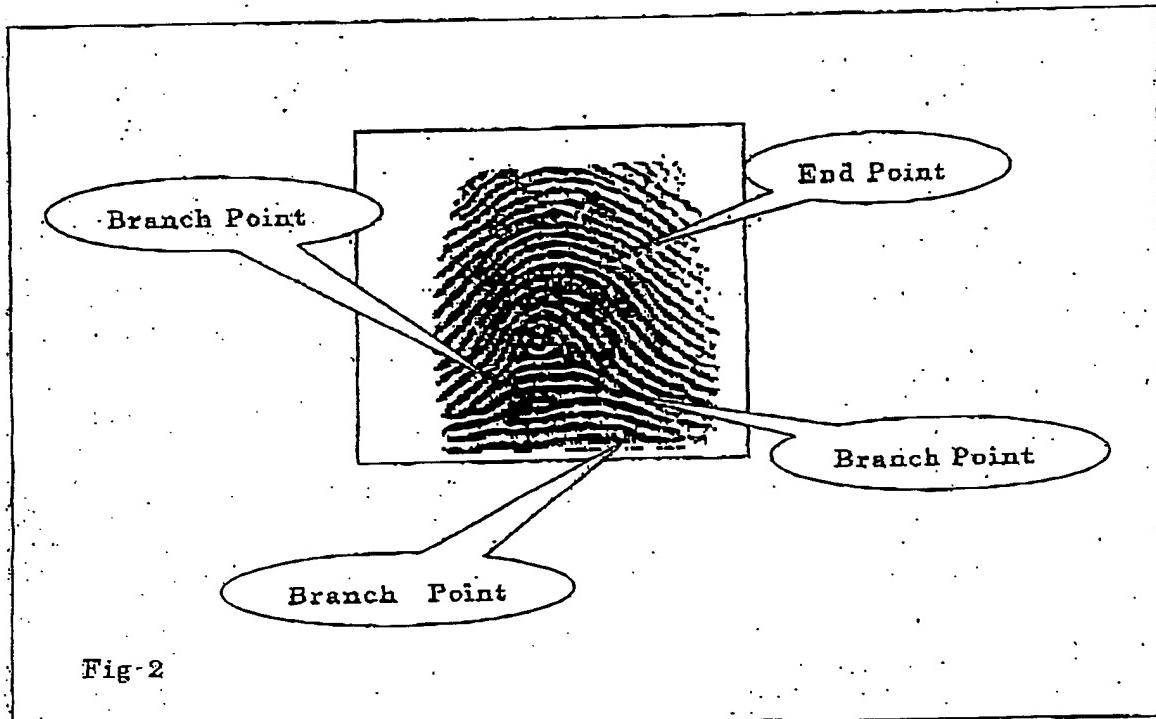


Fig-2